

Work Order ID 62143

Thursday, September 16, 2010 3:37:12 PM



Page 1

Item ID: D4132-042

Accept



Setup Start



Revision ID:

Item Name: Wearplate, RH Fwd

Stop



Start Date: 9/16/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/23/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: MIC

Date: 10-9-16 Tooling: _____ Date: _____

QC: _____

Date: _____ SPC (Y/N): _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D4132 | pb1 |

100



Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo

1-Cut D4132-1F as per Dwg D4132

Dwg Rev: Pb1Prog Rev: Pb1

2-Deburr if necessary

110



QC

Quality Control

QC2- Inspect parts off machine FAFFAIB

0.00

Design
Change

HB 10-9-20

⑧

10-9-20

P10

120



QC

Quality Control

QC3- Inspect parts - second check

0.00

Memo

0.00

RP 10-09-20

Give to Dan Stow before forming

**ENGINEERING
APPROVAL**

| W/O: | | WORK ORDER CHANGES | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr |
| | | | | | | |
| | | | | | | |

Part No: D4132-042 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: <u>62143</u> | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|-------------------|------------|--|--|--|--|--|-----------------------|-----------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| <u>10.10.06</u> | <u>100</u> | <u>Design changed. PARTS NO LONGER CORRECT</u> | <u>W</u> <u>10/10/06</u> <u>JG</u> | <u>SCRAP 9/10.10.06</u> <u>NEW PARTS MADE</u> <u>TO REV. B</u> | <u>10/10/06</u> <u>S</u> <u>10/10/07</u> | <u>W</u> <u>10/10/07</u> <u>OK</u> | <u>10.10.07</u> | <u>B</u> <u>10.10.07</u> |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130

Operation
DescriptionForm as per dwg
NC BRAKESet Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Brake NC

Memo

0.00

**ENGINEERING
APPROVAL**

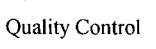
140



QC5- Inspect part completeness to step on W/O

0.00

QC



Memo

0.00

Quality Control

150



Weld per dwg A/R Hardcoat S.S. Batch:_____

0.00

Large Fab

Memo

0.00

Large Fab

Weld hard surface using DT_____ as per QSI 004 and Dwg D4132_____

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Cust Item ID:

Required Date: 9/23/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

160

Operation
Description

QC10- Inspect visual per QSI004- ground welds

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

QC

Quality Control

**ENGINEERING
APPROVAL**

170



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

180



Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

Powdercoat

Powder Coating

Memo

0.00

START TIME: _____
OVEN TEMPERATURE: _____
FINISH TIME: _____

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Item Name: Wearplate, RH Fwd

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Start Date: 9/16/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 9/23/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

200



Small Fab

Memo

0.00

Small Fab

1- Bond D4132-3 gasket to inner surface of wearplate using a thin layer of 3M
1300/1300L scotch grip adhesive

Batch: _____

210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220



Identify as per dwg & Stock Location:

0.00

Packaging

Packaging

Memo

0.00

230



QC21- Final Inspection - Work Order Release

0.00

QC

Quality Control

Memo

0.00

POSITIVE RECALL

EFFECTIVE 10/1/14 AUTH WRELEASED DATE

Picklist Print

Thursday, September 16, 2010 3:37:12 PM

Page 1

Work Order ID: 62143



Parent Item: D4132-042



Parent Item Name: Wearplate, RH Fwd

Start Date: 9/16/2010

Required Date: 9/23/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D4132-3 | | Manufactured | | No | | 200 | Each | 1.0000 | 1 | 2 | | | |

Gasket

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| GA | 1 | |
| 60303 | 1 | |

M304S18GA

304/316 .050 Sheet

| | | | | | | |
|-----------|----|-----|----|----------|-------|----------|
| Purchased | No | 100 | sf | 155.0479 | 1.555 | 3.273684 |
|-----------|----|-----|----|----------|-------|----------|

1B 10-9-20

| Location | Loc Qty | Loc Code |
|----------|----------|----------|
| MAT20 | 155.0479 | |
| 111743 | 7.36 | |
| 112885 | 25.5179 | |
| 113062 | 58.17 | |
| 115389 | 64 | |

②

112885

| | | |
|----------------------------------|--------------|-------------|
| DART AEROSPACE LTD | Work Order: | 62-143 |
| Description: WEARPLATE | Part Number: | D4132-47 |
| Inspection Dwg: D4132-2 Rev: pbi | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

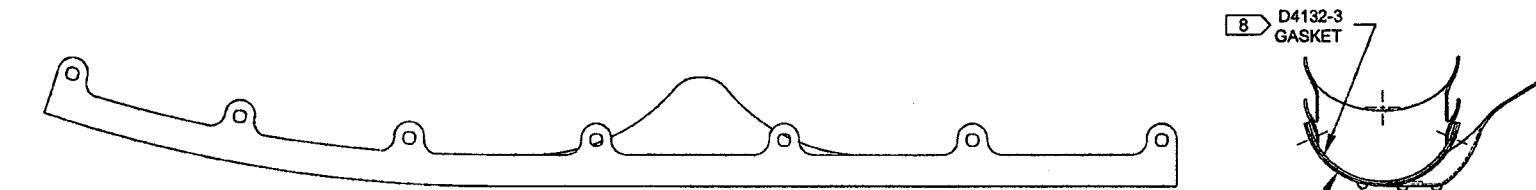
First Article Prototype

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|------------|------------------|--------|--------|----------------------|----------|
| Φ .703 | +.005-.001 | .702 | X | | | |
| .375 | -.010 | .376 | X | | | |
| .490 | -.010 | .490 | X | | | |
| 2.89 | -.030 | 2.877 | X | | | |
| 5.180 | -.010 | 5.176 | X | | | |
| 5.77 | -.030 | 5.770 | X | | | |
| 8.05 | -.030 | 8.0 | | - | | |
| 1.93 | -.030 | 1.920 | X | | | |
| 5.034 | -.010 | 5.025 | X | | | |
| 9.834 | -.010 | 9.824 | X | | | |
| 11.92 | -.030 | 11.92 | X | | | |
| 14.548 | -.010 | 14.548 | X | | | |
| 19.273 | -.010 | 19.273 | X | | | |
| 21.42 | -.030 | 21.42 | X | | | |
| 23.613 | -.010 | 23.613 | X | | | |
| 27.953 | -.010 | 27.953 | X | | | |
| 1.10 | -.030 | 1.080 | X | - | | |
| 4.37 | -.030 | 4.338 | | = | | |
| .300 | -.010 | .305 | | | | |
| .450 | -.010 | .458 | X | | | |
| .050 | -.010 | .047 | X | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

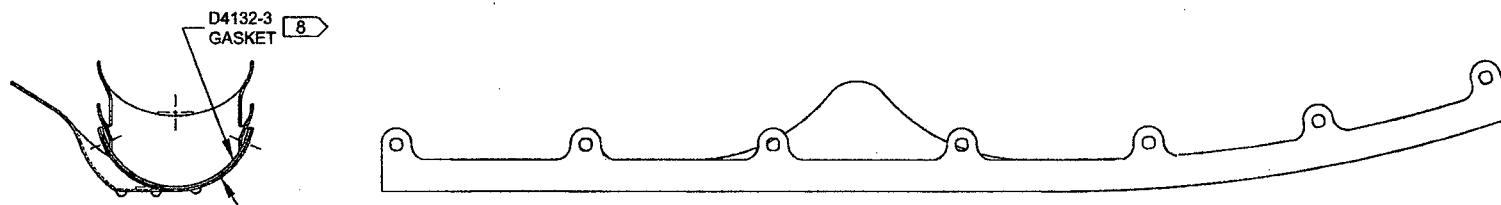
| | | | | | |
|--------------|---------|-------------|--|---------------------|-----|
| Measured by: | IB | Audited by: | | Prototype Approval: | N/A |
| Date: | 10-9-00 | Date: | | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|------|-----------|------------|----------|
| A | | New Issue | KJ/JLM | |

| QTY | QTY | PART NUMBER | DESCRIPTION |
|-----|-----|--------------|-------------------------|
| 041 | 042 | D4132-041 | WEARPLATE, LH FWD |
| X | X | D4132-042 | WEARPLATE, RH FWD |
| 1 | | D4132-1 | WEARPLATE |
| 1 | 1 | D4132-2 | WEARPLATE |
| 1 | 1 | D4132-3 | GASKET |
| A/R | A/R | 1300 / 1300L | 3M SCOTCH-GRIP ADHESIVE |



D4132-041 WEARPLATE, LH FWD



D4132-042 WEARPLATE, RH FWD

PRELIMINARY ISSUE

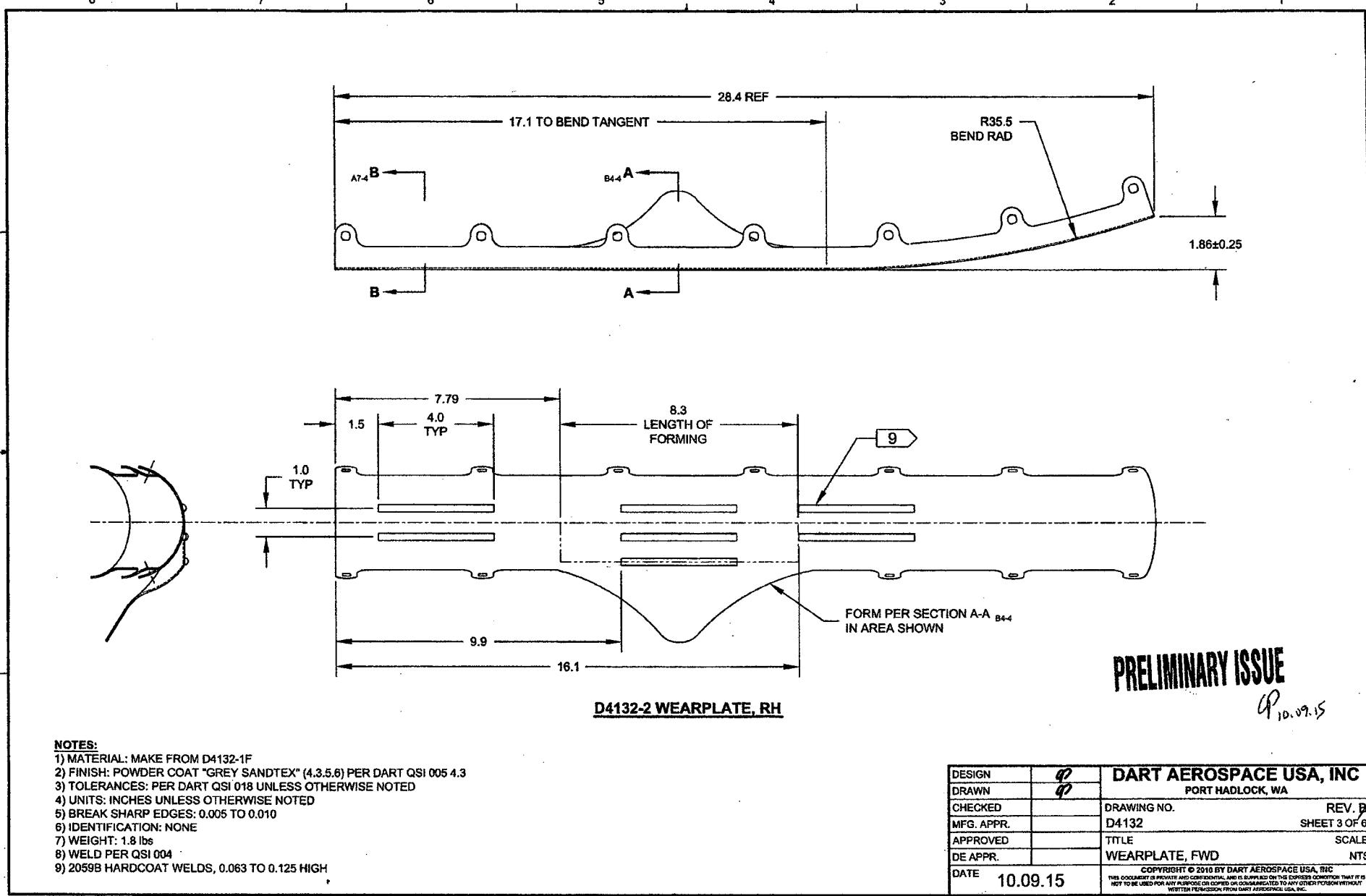
10.09.15

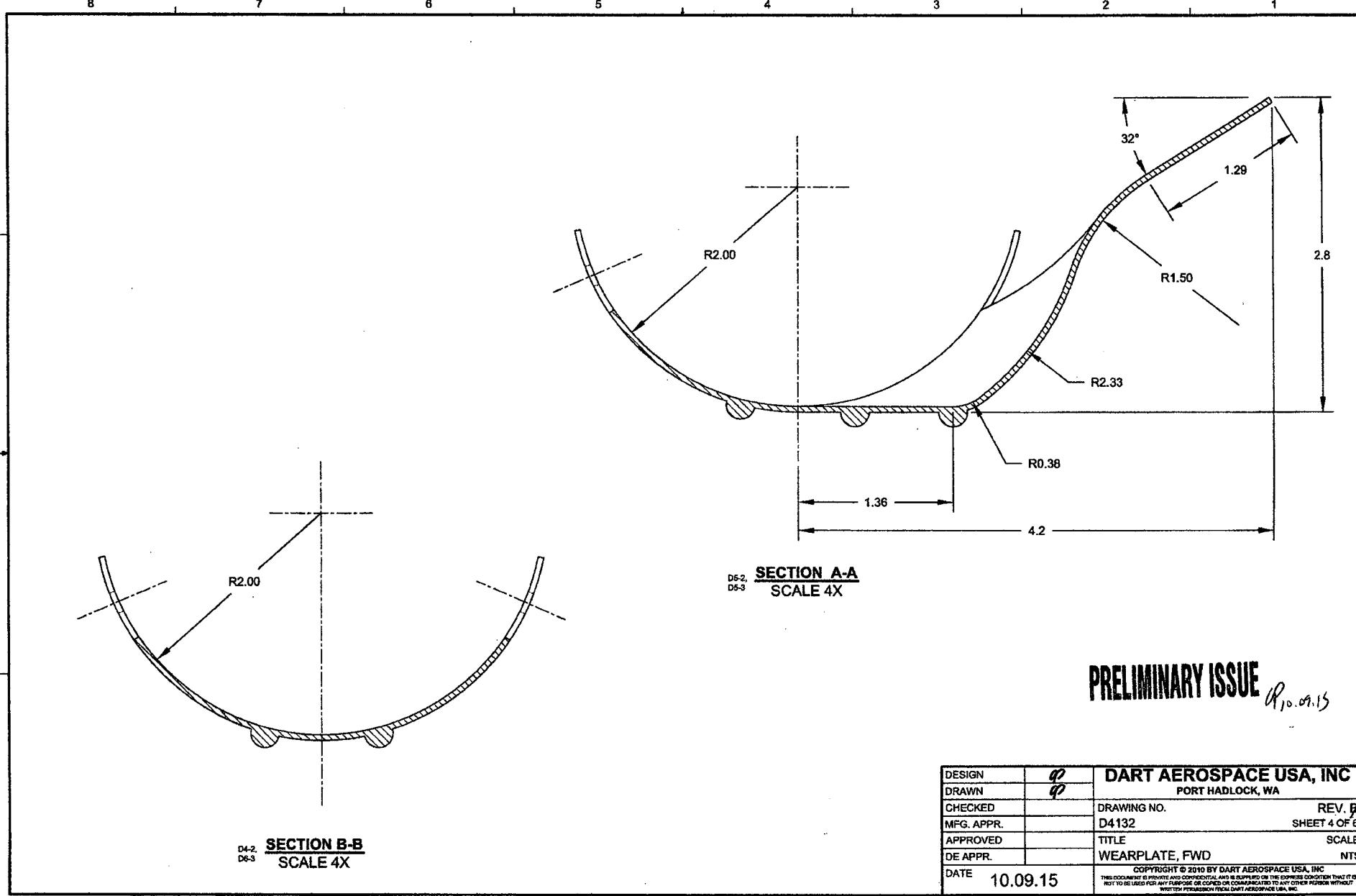
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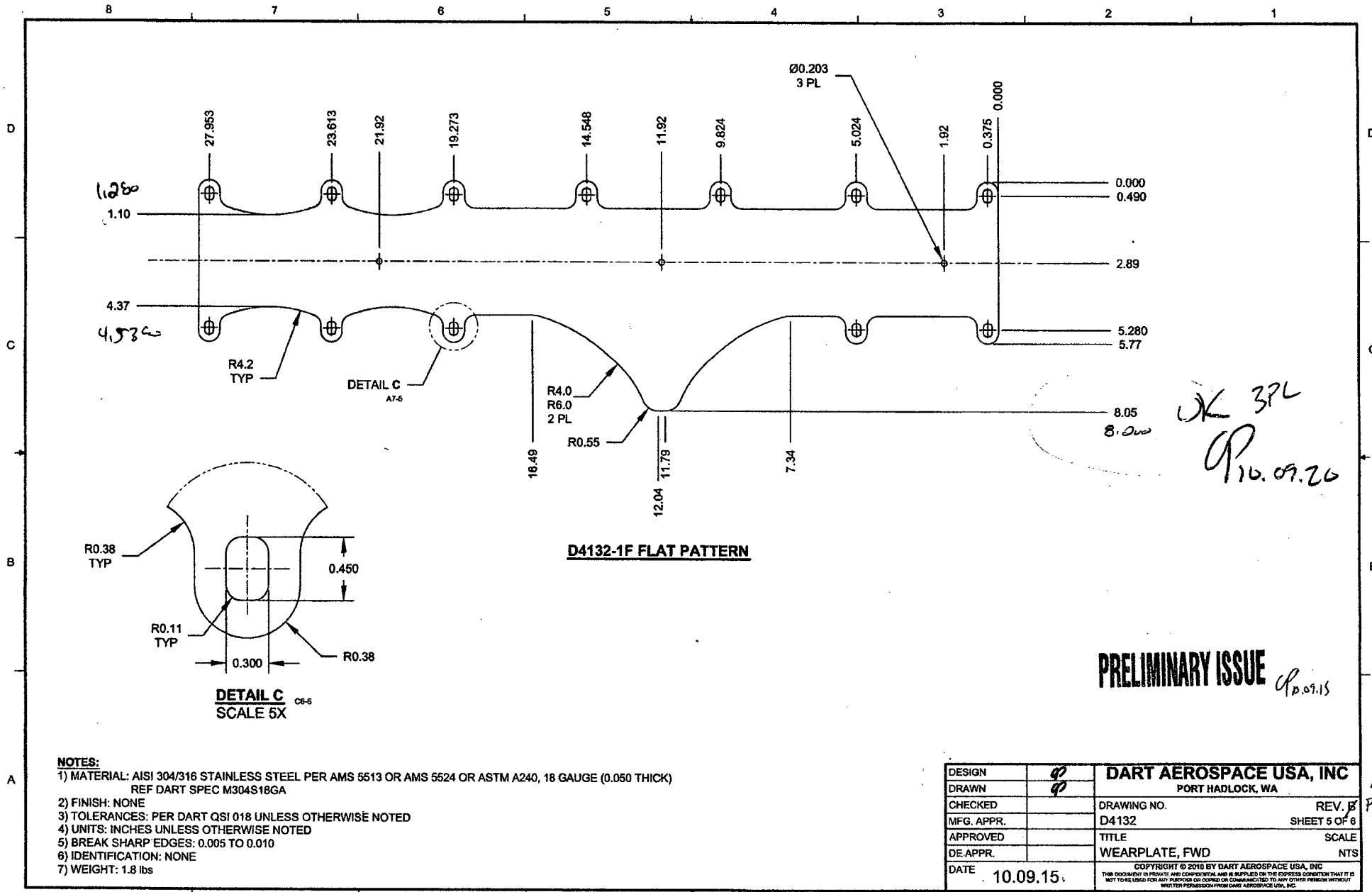
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4132-xx" USING YELLOW PAINT MARKER ON INSIDE SURFACE
- 7) WEIGHT: .041/.042 = 2.1 lbs
- 8) BOND D4132-3 GASKET TO INNER SURFACE OF WEARPLATE USING A THIN LAYER OF 3M 1300/1300L SCOTCH GRIP ADHESIVE

| | | | | |
|------------|-----------|---|--|----------|
| PB | 1 | 0.450 WAS 0.300 | CP | 10.09.15 |
| A | NEW ISSUE | | CP | 10.06.15 |
| REV. | | DESCRIPTION | BY | DATE |
| DESIGN | 90 | DART AEROSPACE USA, INC PORT HADLOCK, WA | DRAWING NO. D4132 REV. B SHEET 1 OF 6 | |
| DRAWN | 90 | | | |
| CHECKED | | | | |
| MFG. APPR. | | | | |
| APPROVED | | | | |
| DE APPR. | | | | |
| DATE | 10.09.15 | TITLE | SCALE | NTS |
| | | WEARPLATE, FWD | | |

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NOTES:

1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524 OR ASTM A240, 18 GAUGE (0.050 THICK)
REF DART SPEC M304S18GA

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010

6) IDENTIFICATION: NONE

7) WEIGHT: 1.8 lbs

| | | | | |
|------------|----------|---|--------------|--|
| DESIGN | 88 | DART AEROSPACE USA, INC | | |
| DRAWN | 99 | PORT HADLOCK, WA | | |
| CHECKED | | DRAWING NO. | REV. B | |
| MFG. APPR. | | D4132 | SHEET 5 OF 6 | |
| APPROVED | | TITLE | SCALE | |
| DE.APR. | | WEARPLATE, FWD | NTS | |
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